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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/205,119	12/03/1998	CHARLES A. ELDERING	8887-3004	8185
27832	7590	01/12/2006		
TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME 2003 SOUTH EASTON RD SUITE 208 DOYLESTOWN ROAD, PA 18901				
			EXAMINER LONSBERRY, HUNTER B	
			ART UNIT 2611	PAPER NUMBER

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/205,119

Applicant(s)

ELDERING ET AL.

Examiner

Hunter B. Lonsberry

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 82-95 and 97-103 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 82-95 and 97-103 is/are rejected.
7) ☒ Claim(s) 97-103 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/5/04, 12/12/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 97-103 are objected to because of the following informalities: There is no claim 96 amongst the newly added claims, and as such claims 97-103 are misnumbered. Appropriate correction is required.

Response to Arguments

2. Applicant's arguments filed 11/2/05 have been fully considered but they are not persuasive.

Applicant argues that Alexander applies collaborative filtering and does not assign a user to any demographic group (Amendment pages 10-11).

Regarding applicants argument, Alexander clearly discloses at column 30, lines 29-37, that over time and with sufficient data, the EPG characterizes a viewer age, martial status, and political affiliations amongst other group attributes. By characterizing a user, Alexander is making probabilistic (meaning there is a degree of uncertainty as only the user themselves would know their actual age, martial status, and likely political affiliations as they do not enter them into the EPG) associations. Further by determining a user's political affiliation and other characteristics, the user is assigned to a group bearing a political affiliation or other characteristics. In nowhere in the text of Alexander is any collaborative filtering mentioned, rather Alexander characterizes user

Art Unit: 2611

demographics upon receiving enough data and after enough time has pass. Alexander does disclose a cross comparison analysis to judge a user's likely interests, but does not disclose cross-referencing other view profiles to determine user demographic characteristics.

Applicant argues that Alexander fails to disclose that a user is associated with a group by correlating a heuristically determined subscriber demographic with a demographic characteristic of a group and that the Examiner admitted that Alexander fails to disclose the use of heuristic rules, and that Alexander does not speculate on a user's age, martial status and has children, nor does the term speculate appear in the disclosure (pages 11-12).

Regarding applicant's argument:

<http://dictionary.reference.com/search?q=heuristic> defines a heuristic as:

Of or relating to a usually speculative formulation serving as a guide in the investigation or solution of a problem: "The historian discovers the past by the judicious use of such a heuristic device as the 'ideal type'"

The Examiner reiterates that Alexander does not teach a system or method in which a user enters any information regarding a user's marital status, whether they have children, age, or likely political affiliations. The profile program, as taught at column 30, lines 29-38, determines over time and with sufficient data, these characteristics (and the resultant groups to which the user would belong). Only the user themselves knows for sure their own age, marital status, children and likely political

Art Unit: 2611

affiliations, any other determination is purely speculation on the part of Alexander's system. The examiner reminds applicant of this point as first discussed in the Final Rejection of 1/29/04. Alexander must use a heuristic rule as it determines user characteristics based upon the number of times a user interacts with an EPG, the Internet and other sources (column 29, line 31-column 30, line 16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 82-95, and 97-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,177,931 to Alexander in view of U.S. Patent 5,446,919 to Wilkins.

Regarding claim 82 and 91, Alexander discloses a method for monitoring a subscribers interactions with targeted programming (the program being currently monitored, column 32, line 61-column 33, line 7, lines 27-43), the method comprising:
monitoring subscriber interactions with the targeted programming (column 32, line 61-column 33, line 7, lines 27-43);

retrieving information corresponding to the targeted programming (column 33, lines 27-43, this type of programming is utilized to determine which advertisements to display to the user within the EPG), wherein the information includes describes at least one viewer characteristic (column 30, lines 1-37)

utilizing heuristic rules associated with the subscriber interactions, wherein the heuristic rules infer at least one subscriber demographic based on subscriber interactions (column 30, lines 1-37, the viewer profile program speculates on the user's age, marital status and has children),

correlating at least one subscriber demographic with at least one demographic characteristic of at least one group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme), and

associating the subscriber with the group if there is sufficient correlation between the at least one subscriber demographic and the at least one demographic characteristic of the group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme).

Alexander fails to disclose retrieving information associated with the targeted programming which describes at least one demographic characteristic of a group associated with the targeted program.

In an analogous art, Wilkins discloses that a user watches a program segment 200, during transmission of the program, a STB retrieves a commercial selection signal

Art Unit: 2611

that displays three different commercials based on user demographics (user income), users with lower incomes view a Hyundai commercial, Moderate incomes view a Ford commercial, and Upper incomes view a Mercedes commercial (column 11, lines 20-41, column 12, lines 31-44), thus providing commercial advertisements which are of most relevance to the user's income.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Alexander to utilize the demographics characteristics as taught by Wilkins in order to provide advertisements which are relevant to a user's purchasing power.

Regarding claims 83-84, Alexander discloses that the heuristic rules are probabilistic in nature and assign a probability of a user's demographic (column 29, lines 56-column 30, line 37, the rules characterize a user's interest and demographic characteristics).

Regarding claims 85, 101, Alexander discloses that the heuristic rules predict product interest characteristics about the subscriber and correlating the product interest characteristic with at least one demographic characteristic of the group (column 30, lines 29-44).

Art Unit: 2611

Regarding claims 86-87, 95, 97, and 102, Alexander discloses monitoring all user interactions with a TV including channel changes, volume changes record commands and associated times (column 28, lines 13-59).

Regarding claims 88 and 103, Alexander discloses that at least one subscriber demographic is based on interactions aggregated over multiple viewing sessions (column 29, lines 22-30, column 30, lines 29-37).

Regarding claims 89, 93-94, Alexander discloses at least one subscriber demographic that does not identify specific subscriber interactions (column 30, lines 29-37, over time the profile program determines a user's marital status, age, sense of humor, has children, this takes place over time and not the result of specific interactions from one session).

Regarding claim 90, Alexander discloses that the user's EPG will monitor channel changes, and the programming displayed on the channel changed too, identification of advertisements on screen, volume changes, whether or not a user changed a channel or not and the time of the channel change (column 28, lines 13-59), this information is utilized to define trails about the user (column 29, lines 31-55, column 30, lines 17-37).

Regarding claims 92 and 100, Wilkins is relied upon to teach subscriber demographics which are not obtained through statistical analysis of the subscriber interactions (column 8, lines 15-38, the database compiles subscriber credit information, and membership information to determine demographics about the user).

Regarding claim 98, Alexander discloses a method for monitoring a subscribers interactions with targeted programming (the program being currently monitored, column 32, line 61-column 33, line 7, lines 27-43), the method comprising:

monitoring subscriber interactions with the targeted programming (column 32, line 61-column 33, line 7, lines 27-43);

retrieving information corresponding to the targeted programming (column 33, lines 27-43, this type of programming is utilized to determine which advertisements to display to the user within the EPG), wherein the information includes describes at least one viewer characteristic (column 30, lines 1-37)

utilizing heuristic rules associated with the subscriber interactions, wherein the heuristic rules infer at least one subscriber demographic based on subscriber interactions (column 30, lines 1-37, the viewer profile program speculates on the user's age, marital status and has children), the at least one subscriber demographic is not directly observable from the subscriber interactions (column 30, lines 29-37, over time the profile program determines a user's marital status, age, sense of humor, has children, this takes place over time and not the result of specific interactions from one session),

correlating at least one subscriber demographic with at least one demographic characteristic of at least one group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme), and

associating the subscriber with the group if there is sufficient correlation between the at least one subscriber demographic and the at least one demographic characteristic of the group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme).

Alexander fails to disclose retrieving information associated with the targeted programming which describes at least one demographic characteristic of a group associated with the targeted program.

In an analogous art, Wilkins discloses that a user watches a program segment 200, during transmission of the program, a STB retrieves a commercial selection signal that displays three different commercials based on user demographics (user income), users with lower incomes view a Hyundai commercial, Moderate incomes view a Ford commercial, and Upper incomes view a Mercedes commercial (column 11, lines 20-41, column 12, lines 31-44), thus providing commercial advertisements which are of most relevance to the user's income.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Alexander to utilize the demographics characteristics as taught by

Wilkins in order to provide advertisements which are relevant to a user's purchasing power.

Regarding claim 99, Alexander discloses at least one subscriber demographic that does not identify specific subscriber interactions (column 30, lines 29-37, over time the profile program determines a user's marital status, age, sense of humor, has children, this takes place over time and not the result of specific interactions from one session). As the user's demographics are presumed to be true, they are inferred based upon a user's behaviour.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


HBL